Kentucky Department of Education

Course Standards for 2019-2020 and Beyond

Course Code: 701040

Course Name: Primary Mathematics

Grade Level: 2

Upon course completion students should be able to:

Standards
Standards for Mathematical Practice ➢ Make sense of problems and persevere in solving them. ➢ Reason abstractly and quantitatively. ➢ Construct viable arguments and critique the reasoning of others. ➢ Model with mathematics. ➢ Use appropriate tools strategically. ➢ Attend to precision. ➢ Look for and make use of structure. ➢ Look for and express regularity in repeated reasoning.
2.OA Operations and Algebraic Thinking **KY.2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart and comparing, with unknowns in all positions, by using drawings and equations with a symbol for the unknown number to represent the problem. **KY.2.OA.2** Fluently add and subtract within 20 using mental strategies. **KY.2.OA.3** Determine whether a group of objects (up to 20) has an odd or even number of members; write an equation to express an even number as a sum of two equal addends. **KY.2.OA.4** Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

Standards

2.NBT Number and Operations in Base Ten

KY.2.NBT.1

Understand that the three digits of a three-digit number represent amounts of hundreds, tens and ones. Understand the following as special cases:

a. 100 can be thought of as a bundle of ten tens — called a "hundred."
b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).

KY.2.NBT.2

Count forwards and backwards within 1000; skip-count by 5s, 10s and 100s.

KY.2.NBT.3

Read and write numbers to 1000 using base-ten numerals, number names and expanded form.

KY.2.NBT.4

Compare two three-digit numbers based on meanings of the hundreds, tens and ones digits, using >, =, and < symbols to record the results of comparisons.

KY.2.NBT.5

Fluently add and subtract within 100 using strategies based on place value, properties of operations and/or the relationship between addition and subtraction.

KY.2.NBT.6

Add up to four two-digit numbers using strategies based on place value and properties of operations.

KY.2.NBT.7

Add and subtract within 1000.

a. Represent and solve addition and subtraction problems using…
   - concrete models or drawings;
   - strategies based on place value;
   - properties of operations;
   - the relationship between addition and subtraction and;
   - relate drawings and strategies to expressions or equations.
b. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.

Standards

KY.2.NBT.8

Mentally add 10 or 100 to a given number 100–900 and mentally subtract 10 or 100 from a given number 100–900.

KY.2.NBT.9

Explain why addition and subtraction strategies work, using place value and the properties of operations.

2.MD Measurement and Data

KY.2.MD.1

Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks and measuring tapes.

KY.2.MD.2

Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.

KY.2.MD.3

Estimate lengths using units of inches, feet, yards, centimeters and meters.

KY.2.MD.4

Measure to determine how much longer one object is than another, expressing the length difference in terms of either a customary or metric standard length unit.

KY.2.MD.5

Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units by using drawings and equations with a symbol for the unknown number to represent the problem.

KY.2.MD.6

Represent whole numbers as lengths from 0 on a number line with equally spaced points corresponding to the numbers 0, 1, 2,... and represent whole-number sums and differences within 100 on a number line.

Standards

KY.2.MD.7

Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

KY.2.MD.8

Solve word problems with adding and subtracting within 100, (not using dollars and cents simultaneously) using the $ and ¢ symbols appropriately (not including decimal notation).

KY.2.MD.9

Investigate questions involving measurements.

a. Identify a statistical question focused on measurements.
b. Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object.
c. Show the measurements by making a dot plot, where the horizontal scale is marked off in whole-number units.

KY.2.MD.10

Create a pictograph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put together, take-apart and compare problems using information presented in a bar graph.

2.G Geometry

KY.2.G.1

Recognize and draw shapes having specified attributes, such as a given number of angles or sides. Identify triangles, quadrilaterals, pentagons, hexagons and cubes (identify number of faces).

KY.2.G.2

Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.

KY.2.G.3

Partition circles and rectangles into two, three, or four equal shares; describe the shares using the words halves, thirds, half of, a third of, etc.; and describe the whole as two halves,

Standards
three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.